



#9

## SEQUENCE LISTING

<110> LAZDUNSKI, MICHEL  
LAMBEAU, GERARD  
VALENTIN, EMMANUEL

<120> CLONING AND RECOMBINANT EXPRESSION OF MAMMALIAN GROUP  
XII SECRETED PHOSPHOLIPASE A2

<130> 1479-R-00

<140> 09/975,374

<141> 2001-10-11

<150> 60/239,489

<151> 2000-10-11

<160> 18

<170> PatentIn Ver. 2.1

<210> 1

<211> 716

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (121)..(690)

<223> cDNA coding the human group XII sPLA2

<400> 1

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ctctgtgggg acgcgccccg cgccgcggct cggggaccgc tagagcccg cgctgcgcgc      120
atg gcc ctg ctc tcg cgc ccc gcg ctc acc ctc ctg ctc ctc ctc atg      168
Met Ala Leu Leu Ser Arg Pro Ala Leu Thr Leu Leu Leu Leu Leu Met
1          5          10          15
gcc gct gtt gtc agg tgc cag gag cag gcc cag acc acc gac tgg aga      216
Ala Ala Val Val Arg Cys Gln Glu Gln Ala Gln Thr Thr Asp Trp Arg
          20          25          30
gcc acc ctg aag acc atc cgg aac ggc gtt cat aag ata gac acg tac      264
Ala Thr Leu Lys Thr Ile Arg Asn Gly Val His Lys Ile Asp Thr Tyr
          35          40          45
ctg aac gcc gcc ttg gac ctc ctg gga ggc gag gac ggt ctc tgc cag      312
Leu Asn Ala Ala Leu Asp Leu Leu Gly Gly Glu Asp Gly Leu Cys Gln
          50          55          60
tat aaa tgc agt gac gga tct aag cct ttc cca cgt tat ggt tat aaa      360
Tyr Lys Cys Ser Asp Gly Ser Lys Pro Phe Pro Arg Tyr Gly Tyr Lys
65          70          75          80
ccc tcc cca ccg aat gga tgt ggc tct cca ctg ttt ggt gtt cat ctt      408
Pro Ser Pro Pro Asn Gly Cys Gly Ser Pro Leu Phe Gly Val His Leu
          85          90          95
aac att ggt atc cct tcc ctg aca aag tgt tgc aac caa cac gac agg      456
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Asn	Ile	Gly	Ile	Pro	Ser	Leu	Thr	Lys	Cys	Cys	Asn	Gln	His	Asp	Arg		
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tgc	tat	gag	acc	tgt	ggc	aaa	agc	aag	aat	gac	tgt	gat	gaa	gaa	ttc		504
Cys	Tyr	Glu	Thr	Cys	Gly	Lys	Ser	Lys	Asn	Asp	Cys	Asp	Glu	Glu	Phe		
		115					120					125					
cag	tat	tgc	ctc	tcc	aag	atc	tgc	cga	gat	gta	cag	aaa	aca	cta	gga		552
Gln	Tyr	Cys	Leu	Ser	Lys	Ile	Cys	Arg	Asp	Val	Gln	Lys	Thr	Leu	Gly		
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cta	act	cag	cat	gtt	cag	gca	tgt	gaa	aca	aca	gtg	gag	ctc	ttg	ttt		600
Leu	Thr	Gln	His	Val	Gln	Ala	Cys	Glu	Thr	Thr	Val	Glu	Leu	Leu	Phe		
		145			150					155					160		
gac	agt	gtt	ata	cat	tta	ggc	tgt	aaa	cca	tat	ctg	gac	agc	caa	cga		648
Asp	Ser	Val	Ile	His	Leu	Gly	Cys	Lys	Pro	Tyr	Leu	Asp	Ser	Gln	Arg		
				165				170						175			
gcc	gca	tgc	agg	tgt	cat	tat	gaa	gaa	aaa	act	gat	ctt	taa				690
Ala	Ala	Cys	Arg	Cys	His	Tyr	Glu	Glu	Lys	Thr	Asp	Leu					
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<210> 2  
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 <212> PRT  
 <213> Homo sapiens

<400> 2																	
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		20						25					30				
Ala	Thr	Leu	Lys	Thr	Ile	Arg	Asn	Gly	Val	His	Lys	Ile	Asp	Thr	Tyr		
		35				40						45					
Leu	Asn	Ala	Ala	Leu	Asp	Leu	Leu	Gly	Gly	Glu	Asp	Gly	Leu	Cys	Gln		
	50					55					60						
Tyr	Lys	Cys	Ser	Asp	Gly	Ser	Lys	Pro	Phe	Pro	Arg	Tyr	Gly	Tyr	Lys		
	65				70					75					80		
Pro	Ser	Pro	Pro	Asn	Gly	Cys	Gly	Ser	Pro	Leu	Phe	Gly	Val	His	Leu		
				85					90					95			
Asn	Ile	Gly	Ile	Pro	Ser	Leu	Thr	Lys	Cys	Cys	Asn	Gln	His	Asp	Arg		
			100					105					110				
Cys	Tyr	Glu	Thr	Cys	Gly	Lys	Ser	Lys	Asn	Asp	Cys	Asp	Glu	Glu	Phe		
		115					120					125					
Gln	Tyr	Cys	Leu	Ser	Lys	Ile	Cys	Arg	Asp	Val	Gln	Lys	Thr	Leu	Gly		
		130				135					140						
Leu	Thr	Gln	His	Val	Gln	Ala	Cys	Glu	Thr	Thr	Val	Glu	Leu	Leu	Phe		
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Asp Ser Val Ile His Leu Gly Cys Lys Pro Tyr Leu Asp Ser Gln Arg  
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Ala Ala Cys Arg Cys His Tyr Glu Glu Lys Thr Asp Leu  
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<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Primer

<400> 3  
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<210> 4  
<211> 37  
<212> DNA  
<213> Artificial Sequence

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<210> 5  
<211> 42  
<212> DNA  
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<210> 6  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Primer

<400> 6  
gcctttccca cgttatggtt 20

<210> 7  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 7

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<210> 8

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 8

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1

5

<210> 9

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Consensus  
sequence

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<221> MOD\_RES

<222> (3)..(4)

<223> Any amino acid

<220>

<221> MOD\_RES

<222> (7)

<223> Any amino acid

<400> 9

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5

<210> 10

<211> 182

<212> PRT

<213> Murine sp.

<400> 10

Ser Pro Ala Leu Leu Leu Leu Leu Leu Ala Thr Ala Arg Gly Gln

1

5

10

15

Glu Gln Asp Gln Thr Thr Asp Trp Arg Ala Thr Leu Lys Thr Ile Arg

20

25

30

Asn Gly Ile His Lys Ile Asp Thr Tyr Leu Asn Ala Ala Leu Asp Leu

35

40

45

Leu Gly Gly Glu Asp Gly Leu Cys Gln Tyr Lys Cys Ser Asp Gly Ser

50

55

60

Lys Pro Val Pro Arg Tyr Gly Tyr Lys Pro Ser Pro Pro Asn Gly Cys  
 65 70 75 80  
 Gly Ser Pro Leu Phe Gly Val His Leu Asn Ile Gly Ile Pro Ser Leu  
 85 90 95  
 Thr Lys Cys Cys Asn Gln His Asp Arg Cys Tyr Glu Thr Cys Gly Lys  
 100 105 110  
 Ser Lys Asn Asp Cys Asp Glu Glu Phe Gln Tyr Cys Leu Ser Lys Ile  
 115 120 125  
 Cys Arg Asp Val Gln Lys Thr Leu Gly Leu Ser Gln Asn Val Gln Ala  
 130 135 140  
 Cys Glu Thr Thr Val Glu Leu Leu Phe Asp Ser Val Ile His Leu Gly  
 145 150 155 160  
 Cys Lys Pro Tyr Leu Asp Ser Gln Arg Ala Ala Cys Trp Cys Arg Tyr  
 165 170 175  
 Glu Glu Ile Thr Asp Leu  
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<210> 11  
 <211> 165  
 <212> PRT  
 <213> Rattus sp.

<400> 11  
 Gln Asp Gln Thr Thr Asp Trp Arg Ala Thr Leu Lys Thr Ile Arg Asn  
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 Gly Ile His Lys Ile Asp Thr Tyr Leu Asn Ala Ala Leu Asp Leu Leu  
 20 25 30  
 Gly Gly Glu Asp Gly Leu Cys Gln Tyr Lys Cys Ser Asp Gly Ser Lys  
 35 40 45  
 Pro Ala Pro Arg Tyr Gly Tyr Lys Pro Ser Pro Pro Asn Gly Cys Gly  
 50 55 60  
 Ser Pro Leu Phe Gly Val His Leu Asn Ile Gly Ile Pro Ser Leu Thr  
 65 70 75 80  
 Lys Cys Cys Asn Gln His Asp Arg Cys Tyr Glu Thr Cys Gly Lys Gly  
 85 90 95  
 Lys Asn Asp Cys Asp Glu Glu Phe Gln Ser Cys Leu Ser Lys Ile Cys  
 100 105 110  
 Arg Asp Val Gln Lys Thr Leu Gly Leu Ser Gln Asn Val Gln Ala Cys  
 115 120 125  
 Glu Thr Thr Val Glu Leu Leu Phe Asp Ser Val Ile His Leu Gly Cys  
 130 135 140  
 Lys Pro Tyr Leu Asp Ser Gln Arg Ala Ala Cys Trp Cys Arg Tyr Glu  
 145 150 155 160

Glu Lys Thr Asp Leu  
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<210> 12  
<211> 136  
<212> PRT  
<213> Bovine sp.

<400> 12  
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Lys Cys Ser Asp Gly Ser Lys Pro Phe Pro Arg Tyr Gly Tyr Lys Pro  
20 25 30  
Ser Pro Pro Asn Gly Cys Gly Ser Pro Leu Phe Gly Val His Leu Asn  
35 40 45  
Ile Gly Ile Pro Ser Leu Thr Lys Cys Cys Asn Gln His Asp Arg Cys  
50 55 60  
Tyr Glu Thr Cys Gly Lys Ser Lys Asn Asp Cys Asp Glu Ala Phe Gln  
65 70 75 80  
Ser Cys Leu Ser Lys Ile Cys Arg Asp Val Gln Lys Thr Leu Gly Leu  
85 90 95  
Ala Gln His Val Gln Ala Cys Glu Thr Thr Val Glu Leu Leu Phe Asp  
100 105 110  
Ser Val Ile His Leu Gly Cys Lys Pro Tyr Leu Asp Ser Gln Arg Ala  
115 120 125  
Ala Cys Arg Cys Arg Tyr Glu Glu  
130 135

<210> 13  
<211> 194  
<212> PRT  
<213> Xenopus sp.

<400> 13  
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1 5 10 15  
Pro Arg Phe Ser His Gln Glu Pro Trp His Gln Ser Asp Gln Gln Pro  
20 25 30  
Glu Thr Pro Asp Trp Arg Met Thr Leu Lys Thr Ile Arg Asn Gly Val  
35 40 45  
His Lys Ile Asp Met Tyr Leu Asn Ala Ala Leu Asp Leu Leu Gly Gly  
50 55 60  
Ala Asp Gly Leu Cys His Tyr Glu Cys Arg Asp Gly Ser Lys Pro Val  
65 70 75 80  
Pro Arg Tyr Gly Tyr Arg Pro Ser Pro Pro Asn Gly Cys Gly Ser Pro

				85						90					95		
Val	Phe	Gly	Val	His	Asp	Ile	Gly	Ile	Pro	Ser	Met	Thr	Lys	Cys	Cys		
			100					105					110				
Asn	Gln	His	Asp	Arg	Cys	Tyr	Asp	Ser	Cys	Gly	Ile	Met	Lys	Asn	Asp		
		115					120					125					
Cys	Asp	Glu	Glu	Phe	Gln	Asn	Cys	Leu	Ser	Lys	Ile	Cys	Arg	Asp	Val		
		130				135					140						
Gln	Lys	Thr	Leu	Gly	Ile	Ser	Glu	Thr	Val	Gln	Ala	Cys	Glu	Thr	Thr		
		145			150					155					160		
Val	Gly	Leu	Leu	Phe	Asp	Ala	Val	Ile	His	Leu	Gly	Cys	Lys	Pro	Tyr		
				165				170						175			
Leu	Glu	Ser	Gln	Arg	Ala	Ala	Cys	Ile	Cys	Gln	Tyr	Glu	Glu	Lys	Ile		
			180					185					190				

Asp Leu

<210> 14  
 <211> 37  
 <212> PRT  
 <213> Homo sapiens

<400> 14  
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 Pro Val Asp Glu Leu Asp Lys Cys Cys Gln Thr His Asp Asn Cys Tyr  
 20 25 30  
 Asp Gln Ala Lys Lys  
 35

<210> 15  
 <211> 43  
 <212> PRT  
 <213> Homo sapiens

<400> 15  
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 1 5 10 15  
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 20 25 30  
 Glu His Asp Arg Cys Pro Gln Asn Ile Ser Pro  
 35 40

<210> 16  
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 <212> PRT  
 <213> Conus magus

<220>  
<221> MOD\_RES  
<222> (15)  
<223> Any amino acid

<220>  
<221> MOD\_RES  
<222> (21)  
<223> Any amino acid

<400> 16  
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Pro Cys Gln Lys Xaa Phe Leu Ala Ala Cys Asp Arg His Asp Thr Cys  
20 25 30  
Tyr His Cys Gly Lys His  
35

<210> 17  
<211> 41  
<212> PRT  
<213> Oryza sativa

<400> 17  
Pro Leu Leu Arg Tyr Gly Lys Tyr Cys Gly Ile Leu Tyr Ser Gly Cys  
1 5 10 15  
Pro Gly Glu Arg Pro Cys Asp Ala Leu Asp Ala Cys Cys Met Val His  
20 25 30  
Asp His Cys Val Asp Thr His Asn Asp  
35 40

<210> 18  
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<212> PRT  
<213> Homo sapiens

<400> 18  
Tyr Lys Pro Ser Pro Pro Asn Gly Cys Gly Ser Pro Leu Phe Gly Val  
1 5 10 15  
His Leu Asn Ile Gly Ile Pro Ser Leu Thr Lys Cys Cys Asn Gln His  
20 25 30  
Asp Arg Cys Tyr Glu Thr Cys Gly Lys  
35 40